

Report on early enactment of junior cycle Business Studies and Science

Contents

Contents	3
Introduction	5
Context	5
Consultation Process	7
Report structure	7
Consideration of findings	8
Planning for teaching, learning and assessment	10
Course Overview	10
200-hour student engagement	12
Common level	12
Planning using Learning Outcomes	13
Learning Outcomes	13
Time for planning collaboratively	15
Key skills	16
Formative assessment	16
Alignment with final examination	17
Assessment in junior cycle Business Studies and Science	18
Classroom-Based Assessments	18
Classroom-Based Assessment one	22
Business Studies	22
Science	23
Classroom-based assessment two	25
Business Studies	25
Science	26
Examples of Student Work	27

Subject, Learning and Assessment Review (SLAR) Meetings	30
Assessment Task	33
Final Examination	35
Reporting	37
Additional areas of discussion	40
Transition to senior cycle	40
Supports <i>as Gaeilge</i>	41
JCSP Programme	41
Communicating with parents	41
Next steps	43
Feedback related to the specifications for JC Business Studies and Science	43
Feedback related to the Framework for Junior Cycle (2015)	44
Professional time	44
Support for Parents	44
Classroom-Based Assessment	45
Assessment Task	46
SLAR Meetings	46
Final Examination	46
Junior Cycle Profile of Achievement	46
Appendix One	47
Appendix Two	48
Appendix Three	51
Appendix Four	57

Introduction

In line with the Framework for Junior Cycle (2015), new subject specifications for Junior Cycle Science and Business Studies were introduced in schools in September 2016 as part of Phase 2 of the introduction of new subject specifications. The National Council for Curriculum and Assessment (NCCA) conducted an early insights review between October and December 2019 to gather feedback to evaluate and explore:

- how well the specifications get to the heart of the learning aspired to within each subject and more broadly within the Framework for Junior Cycle
- the assessment elements within each subject, as experienced by students and teachers
- how teachers are exercising their professional judgement to mediate the new specification in their schools and classrooms.

This review, and reviews conducted into the early enactment of Junior Cycle English (Phase 1) will inform a multi-faceted, multi-dimensional study of the impact of the changes made as a result of the introduction of the Framework for Junior Cycle, which is due to commence in 2020.

Context

In considering the feedback outlined in this report it is important to be mindful of three important contextual factors affecting this review:

- The context within which the specifications were developed and implemented
- The profile of teachers who teach Business Studies and Science
- The specialist focus on different domains within the two subjects in senior cycle education.

The development of the new specifications for Business Studies and Science commenced in 2013 in line with the Framework for Junior Cycle (2012). This earlier Framework set out new assessment arrangements for subjects, whereby assessment, including final examinations would move over time from external to internal assessments administered and marked by schools. The emergence of the Framework for Junior Cycle (2015) saw this approach to assessment revised and placed the responsibility for the development, administration, marking and reporting on the final assessments with the State Examinations Commission (SEC).

2016 was a time of significant change within post-primary education in Ireland and the new specifications for junior cycle Business Studies and Science were introduced in schools in the latter

stages of a protracted industrial dispute. There was system-wide agreement about the importance of securing the resources needed to introduce curricular reform, the timely provision of CPD was recognised as an important conducive condition to support teachers and schools to enact the change involved. However, the industrial relations dispute resulted in delayed engagement with Continuing Professional Development (CPD) in some schools. As a result, a significant cohort of teachers did not engage with CPD until Spring 2017. This delay was not insignificant, Figure 1 below outlines how CPD to support the introduction of the specifications had already commenced in the school year 2015-2016. It is inevitable that this delayed engagement impacted on the enactment of the specifications in some schools.

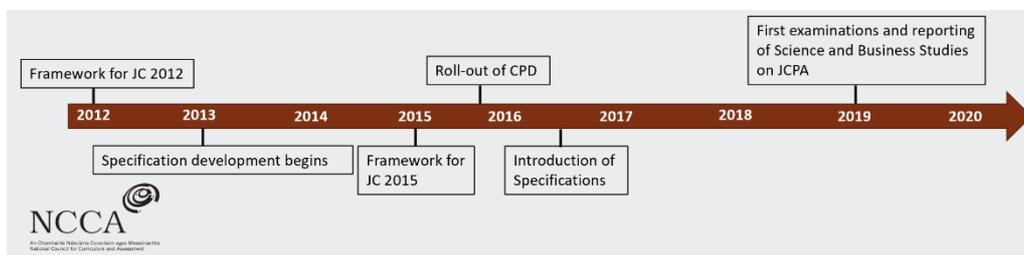


Figure 1: Overview of specification development and implementation timeline

Figure 2 below presents an overview of junior cycle subject progression. Having completed junior cycle Business Studies, students may opt at senior cycle level to study Business, Accounting or Economics, or a combination thereof, subject to availability in their schools. Students have a similar range of options for specialisation in Science, where Physics, Chemistry, Biology, Agricultural Science and Phys/Chem are options for further study, again based on school availability. Feedback from this review suggests that there is a tendency for teachers of both Science and Business Studies to view the new specification through the lens of their senior cycle subject.

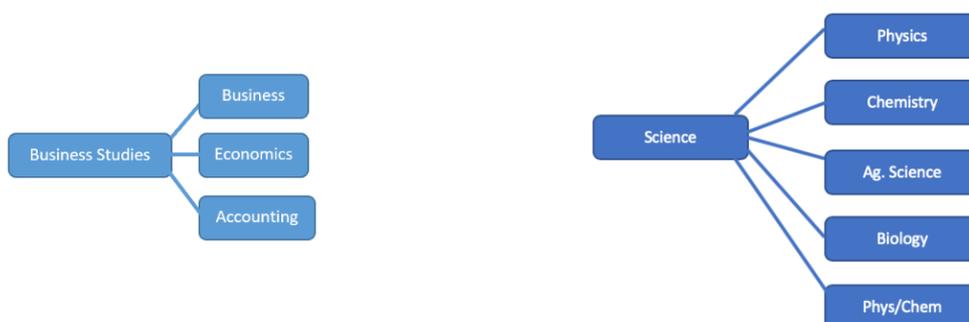


Figure 2: Overview of junior cycle subject progression to specialist area(s)

Consultation Process

The review was conducted from October to December 2019, in line with a format agreed by Council and the Board for Junior Cycle. A mixed-methods approach to gathering the data was employed:

- focus groups of teachers in a cross-section of six schools (39 participants)¹
- focus groups with students across a range of cohorts in the six schools (163 participants)
- three teacher consultation events² in Cork, Galway and Dublin (110 participants)
- online questionnaire (27 submissions)
- written submissions
 - Business Studies Teachers Association of Ireland (BSTAI)
 - Irish Science Teachers Association (ISTA)
 - The Junior Cycle for Teachers (JCT) Business Studies and Science teams
 - Department of Education and Skills (DES) Inspectors of Business Studies and Science.

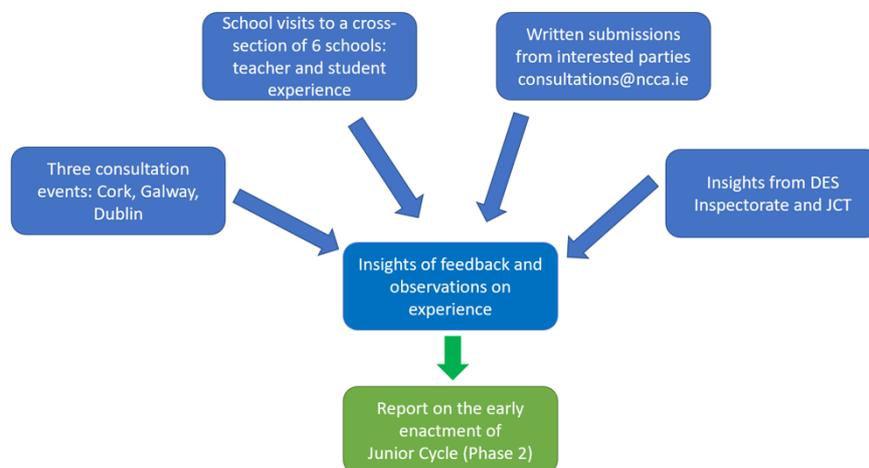


Figure 3: Overview of consultation process

Report structure

This report offers insights into experiences in junior cycle Business Studies and Science through the lens of four main themes outlined in the table below. These aspects of junior cycle are experienced in

¹ See Appendix One for further details

² See Appendix Two for the guiding template used to support these discussions

an integrated way by students and teachers and consequently, some overlap across sections will be evident in this report. Within the report, feedback is explored as an overall commentary on the enactment of phase 2 of junior cycle with additional subject-specific feedback where relevant. Quotes from participants and stakeholders are italicised throughout this report.

Planning for teaching, learning and assessment	Course overview, working with Learning Outcomes including insights into formative assessment, key skill development and collaborative planning
Assessment for the JCPA	Classroom-based assessments (CBAs) Subject Learning and Assessment Review (SLAR) meetings and insights into the use of examples of student work Assessment Task (AT) Final examination
Reporting	Ongoing reporting and the Junior Cycle Profile of Achievement (JCPA)
Other Areas of Discussion	Alignment with senior cycle, progression to senior cycle subjects, JCSP statements, challenges with parental awareness and understanding of the Framework for Junior Cycle (2015)

Figure 4: Report structure

An overview of the aim of the specifications for Business Studies and Science together with a summary of assessment for the Junior Cycle Profile of Achievement (JCPA) in each subject is provided in Appendix Four of this report.

Consideration of findings

The findings of the review have been considered by NCCA in terms of potential implications arising for both the work of the NCCA and other stakeholders in the implementation of the Framework for Junior Cycle. Next steps are proposed to address the implications arising from this early insights report in the final section of this document.

NCCA wishes to thank the schools who facilitated the school visits conducted as part of the review, the teachers who participated in the consultation event focus groups and all those who took the time to complete a written submission or submit a report. In addition, NCCA would also like to thank the BSTAI, ISTA JCT, and the education partners who raised awareness of the review and shared the invitation to participate at CPD events and via online platforms, including mailing lists and social media.

Planning for teaching, learning and assessment

This section of the report will consider an overview of the feedback gathered on both specifications and will explore how teachers have used the learning outcomes within the specifications to plan for teaching, learning and assessment.

Course Overview

The flexibility afforded by the specifications for both Business Studies and Science was broadly welcomed by participants in the review. Teachers welcomed opportunities to *bring the learning in the classroom to life* and the opportunity afforded by the learning outcomes to *provide relevant and engaging experiences* for their students. Students equally valued the relevance of their learning in these subjects and reported how they enjoyed learning about aspects of Business Studies and Science *that they can relate to their daily lives*.

The course caters for students of all interests – this is good for our students and we have seen improvement – this makes it more interesting for the students.

Teacher feedback from focus group

I like learning stuff that makes sense. Like things that are relevant to your future like being an entrepreneur and how you can start your own business, what is involved and stuff. I think that will be useful for me in the future

Student feedback from school visit

I like experiments because it helps me to see Science happening in front of my eyes and even if the experiment doesn't work out exactly right, I'm still learning something. Research is good too- I've learned lots about our solar system that I didn't know before

Student feedback from school visit

Business Studies teachers welcomed particularly what they referred to as an increased focus on *the application of knowledge and analysis*. They noted that there was an increased emphasis on students applying the content knowledge they acquired which many felt gave students a greater awareness of the relevance of the subject to their daily lives and supported a deeper understanding of how learning in the three strands of the specification are inter-related.

There were mixed views amongst Business Studies teachers about the increased emphasis on economics within the new specification. Many welcomed *the greater opportunity* for students to *develop their understanding of how the economy impacts on business and finance* provided by the inclusion of the *Our Economy* strand. They spoke positively about the *more analytical focus* within the accounting-related learning outcomes which they felt gave students a greater insight into the importance of *prudent and ethical financial management*. Others perceived this as a *downgrading of accounting* to make room for this strand which was for them a cause for concern. We will return to this point later in the report. The submission from the DES Business Studies inspectors welcomed the focus in the specification on sustainability and sustainable development and mirrored the teachers' welcome of the relevance of the learning to students' lives.

A key strength of the junior cycle Business Studies specification that in so far as it is possible the learning outcomes are future proofed. The realisation of students engaging with important and current themes in education and society such as sustainability and creativity are facilitated and are very apparent throughout the Business Studies specification. In relation to our work with schools we are receiving very good feedback regarding the specification and teachers are positive in their attitudes to date.

Written report from the Inspectorate

In terms of Science, the introduction of the unifying strand *The Nature of Science* and the *Earth and Space* strand came in for much discussion. There was a general welcome for the unifying strand which has a strong focus on scientific inquiry and underpins the learning in the other strands. Many teachers welcomed the opportunity to develop *research and inquiry skills* and focus on *ethics* and *the suitability of sources* whilst a small cohort of teachers said that these skills were *too difficult for students in junior cycle* and they should *wait until third level* to engage with this learning.

Science teachers expressed mixed views about the introduction of the *Earth and Space* strand. It appears that teachers' concerns about the introduction of this new area of learning related to their confidence. Some mentioned being *fearful* not having studied that material in college and it was Physics specialists who placed most value on this area of learning and reported being *excited* to teach this *new exciting and motivating* material from *an evolving area of science* to students in junior cycle. Feedback indicated that teachers' confidence improved the more they engaged with the material and they were mainly complimentary about the CPD in this area. A small number of teachers whose specialism at senior cycle is biology, concerned with the omission of content from the *Biology World* strand, questioned *the wisdom* of including this material at what they saw as the expense of *important content* such as *the bones in their body*. Students reported that they enjoyed learning about space and found it motivating and relevant.

200-hour student engagement

Both specifications are designed for a minimum of 200 hours of student engagement/ class contact, there were a number of different approaches to timetabling reported, the most common arrangement reported being a mixture of one-hour and forty- or forty-five-minute classes. Many teachers expressed concern about the 200hr allocation as they see it as a reduction in contact time for their subjects and reported finding it very difficult to *get through the course*. Some teachers also spoke about how they were focusing on incrementally developing students' procedural knowledge, inquiry and communication skills through the learning outcomes of contextual strands over the three years. These teachers were less likely to express concern about the time allocation.

Common level

Both Business Studies and Science are offered at Common Level within the new junior cycle. Teachers expressed mixed views about this, with some teachers suggesting that it does not serve the needs of more able students, and reporting finding it difficult to challenge all students appropriately.

In our department we are finding it very difficult to know what to aim for in common level. Like – how much depth is required. This makes it harder to challenge all students at the right level and ensure that they are all motivated

Teacher feedback from focus group

Others welcomed the shift to common level, which they saw as more inclusive for students. Some reported that the specifications were more accessible for students of all abilities due to opportunities within the Learning Outcomes to link learning with student interests, local context and topical issues.

I believe this specification allows for greater inclusion of pupils by not splitting students into higher and ordinary levels and I applaud that decision. I always found a third-year class with higher and ordinary levels to be the toughest class to teach under the previous syllabus. This specification allows for more peer learning and student interaction.

Written teacher submission

Planning using Learning Outcomes

Learning Outcomes

Learning for students is expressed in both specifications in the form of Learning Outcomes. These set out the knowledge, understanding, skills and values students should be able to demonstrate after a period of learning in both subjects. Throughout the review, teachers highlighted the strengths and challenges of working with learning outcomes.

In terms of strengths, and as mentioned earlier, teachers welcomed the updating of both subjects, making them more meaningful and relevant to students' lives. They spoke about the opportunities for *rich and relevant learning* and highlighted the positive impact of collaborative planning and *working together as a subject department* to plan for teaching, learning and assessment using learning outcomes. The JCT support service reported similar observations when reflecting on their experiences with teachers.

Over the last five years we have seen varied attitudes to the value of learning outcomes emerge. Teachers and subject departments who have engaged collaboratively in developing their understanding of learning outcomes have seen real value for themselves as professionals working together. These teachers are beginning to see the potential of the specification to support them in providing rich learning experiences relevant to their student cohort.

JCT Support Service

Teachers elaborated on the challenges they faced when adjusting to planning for teaching and learning using learning outcomes. The main difficulty raised by teachers across the review related to the *flexible open-ended* nature of the learning outcomes in both specifications. Teachers of both Business Studies and Science highlighted specific learning outcomes that they felt challenged them when planning for teaching, assessment and learning and said that clarification on these specific learning outcomes would be welcomed.

I have been happy using learning outcomes to plan and deliver lessons but there seems to be different ideas as to what a learning intention is in the wider system and as such it can be difficult to be sure if you are correct in what you present to students as learning intentions.

Written teacher submission

Teachers sometimes spoke about lacking confidence in identifying the knowledge, understanding, skills and values within the learning outcomes and making decisions about what learning to pursue, and were worried that their students would not be adequately prepared for the final external examination at the end of 3rd year.

Our subject department has experienced many challenges when using learning outcomes to plan, as they do not contain enough detail. We are frequently unsure of the depth of coverage required for most of the Learning Outcomes. In addition, the learning outcomes make planning common assessments difficult in our school, as each teacher has covered each topic to a different degree of depth and, therefore, each teacher will often require a different assessment for their class.

Written teacher submission

This challenge facing teachers was also noted by the JCT support service

For some [teachers] when engaging with Learning Outcomes there is a fear that they are not covering sufficient detail, they know 'where to start' but 'not necessarily where to end'

JCT Support Service

Science teachers in particular expressed concern about the different ways learning outcomes could be interpreted and taught in the classroom and feared that differences of interpretation and enactment could lead to inequity in the system and within schools. Some participants in this review suggested that when interpreting the learning outcomes, science teachers were planning for learning in terms of their specialist subject at Leaving Certificate ahead of the consideration of what is age and stage appropriate learning

It depends on the teacher you have whether they decide to teach something or not. We all have different takes on what you should teach. When you get your class in 5th year, they are all coming from different teachers there is no guarantee they have covered the same material

Teacher feedback from focus group

The submission from the JCT support service noted some over-reliance on textbooks and the *time pressures in engaging in planning for teaching, learning and assessment on an ongoing basis* as concerns they had observed from teachers.

[Some teachers] continue to use the textbooks as their primary planning tool. They lack professional confidence and while they engage with learning outcomes they then 'do all the stuff in the book as well' and so these teachers find the specification overwhelming to engage with in a 200-hour time quota.

JCT Support Service

Planning for learning in terms of the subject they teach at senior cycle was a feature of the feedback from the Business Studies teachers who participated in this review, with teachers of Accountancy concerned that the specification did *not go far enough* for students and they would be unprepared for Leaving Certificate Accounting.

The submission from the DES Business Studies inspectors also referred to their experience of the specifications during their inspections of teaching, learning and assessment. Observations of note include concerns about teachers seeing the learning outcomes of the specification as different *chapters* and not working directly with the learning outcomes for planning *in an integrated way across strands*. They suggested from their observations that this practice contributed to teachers' belief that the course is too long. The report from the Inspectorate also raised concerns around cross-strand planning. Whilst there were few examples to date from the inspections they had carried out that this was happening, they expressed hope that teachers *will become more comfortable with planning across the strands* as they become more familiar with the specification.

Time for planning collaboratively

Teachers taking part in the review welcomed the opportunities for collaboration as part of the enactment of the new junior cycle and highlighted how the reform had supported a greater focus on discussions around teaching, assessment and learning and reflective practice.

Planning is better now because we share more and talk more about what we are doing in our classes rather than just putting stuff down on paper and comparing results to the national average. That's better in my opinion and more useful in the long term.

Teacher feedback from school visit

Whilst the Department of Education and Skills (DES) has recognised the value of collaborative planning through the provision of professional time for teachers, many of the teachers who participated in this review suggested that more time is needed

40 mins per week time allocated for planning, not enough, totally inadequate, 'the powers that be' have no concept of the amount of work involved, looking for and making new resources, doing background research to get a better comprehension of the new topics on syllabus etc... This TIME should be most DEFINITELY retained for each teacher moving forward and increased to 80 mins at least per week, this work is ongoing and will still be required going forward with the huge demands on the teacher to deliver a high standard syllabus

Written teacher submission

Some teachers reported finding it difficult to find a time to meet that was mutually agreeable to all teachers in the subject department. Others reported bundling time to use outside of the school day, whilst others reported using lunchbreaks to meet. Teachers taking part in the review suggested that other solutions might be useful such as the use of some of the time currently assigned to staff development as part of the 33 *Croke Park hours*.

Planning as a department has its challenges. Yes, we have been time-tabled one class less in the week, but the entire department is never off at the same time, so we resort to lunchtime.

Written teacher submission

Key skills

The focus on key skills in both subject specifications and in the Framework for Junior Cycle (2015) more generally was broadly welcomed across the review. Skills such as research, reflection and communication are recognised as vital skills for students as they develop as life-long learners and engaged citizens. Participants in the review welcomed the opportunities within the specifications to develop a wide range of skills that would support students across subject areas, in study, preparation for senior cycle and life beyond junior cycle.

There was evidence from the review that clarity was needed in the system as to the expectations around planning for the integration of key skills. Some teachers are planning explicitly for the development of key skills and others are planning for the integration of key skills into teaching, learning and assessment.

I'm definitely a fan of key skills but I think they should be a natural part of what happens in the classroom – like sometimes asking students to present their work rather than write or maybe asking them to research something. I don't think we should be starting with the key skill but some people I've talked to think you're expected to do that.

Teacher feedback from school visit

Formative assessment

Teachers taking part in the review welcomed the renewed focus on formative assessment in planning for teaching, learning and assessment. For many teachers, the development of success criteria aligned with the learning outcomes was seen as the most challenging aspect of formative assessment.

A cross-section of teachers participating in the review considered the use of learning intentions and success criteria *challenging*, in particular where they had engaged in the co-creation of success criteria with students.

However, teachers participating in the review said that success criteria were vital in scaffolding feedback conversations with students. Some teachers expressed concerns around the amount of time taken to provide effective feedback, and many teachers reported that they found verbal feedback effective in supporting student learning and less time consuming.

Throughout the review, teachers reflected that renewed focus on providing feedback to students and parents is positive and that in many cases this was increasing ongoing communication with parents.

Well I guess it is clearer now in ways as to how you improve as we are much more conscious of providing feedback for students to improve. That can be time-consuming if it has to be done in writing all of the time, but I find giving verbal feedback really helpful too

Teacher feedback from school visit

The New Junior Cycle has changed the way we communicate and report to students and parents. There is greater communication and feedback being given directly to students on their CBAs. There is also an increase in the number of formal reports to parents in some schools which requires additional teacher time.

Written submission from BSTAI

Alignment with final examination

Many of the concerns expressed about alignment of the specification with the final assessment related to challenges involved with externally marked common level assessments more generally.

Whilst participants welcomed the style of questioning, they noted that many questions, in particular, those that required students to analyse data and information were by their nature challenging for a cohort of students who found learning difficult and favoured more able students.

My good students spent the time reading the question and worked out the context didn't matter but my weaker students would take one look and say we didn't do that and move on

Teacher feedback from focus group

On viewing the SEC marking schemes both Business Studies and Science teachers were critical of the level of specificity required. They spoke about how questions assessing open learning outcomes required very *specific* answers and teachers felt they hadn't adequately *prepared* their students to be able to give the specific details required in answers as outlined by the marking scheme.

Whilst there was evidence of a positive backwash effect of the final assessment into teaching and learning there is also a risk that there will be an increased emphasis on preparing students for examination questions.

Assessment in junior cycle Business Studies and Science

The dual approach to assessment in junior cycle is designed to support student learning over the three years of junior cycle and to measure achievement at the end of those three years. This dual approach is intended to reduce the focus on the final examination and to increase the prominence given to Classroom-Based Assessments (CBA) and formative assessment. This change of emphasis arises from an acknowledgement that students learn best when teachers provide feedback that helps students to understand how their learning can be improved as outlined in the Framework for Junior Cycle 2015.

Students in both Business Studies and Science undertake two CBAs, one in second year and the other in third year. The CBAs offer students opportunities to further develop and demonstrate an understanding of their learning in the subject and the integrated development of a range of key skills. Having completed the second of the CBAs, students complete a written Assessment Task which is reflective in nature, focusing on what they have learned and the skills and competences that they have developed in that CBA. The Assessment Task, along with the final examination at the end of third year is marked by the State Examinations Commission (SEC).

These assessment moments in junior cycle are complemented by ongoing formative assessment in the classroom where students receive feedback from their teacher and in some cases, engage in self- and peer assessment. This section of the report will explore feedback in relation to the Classroom Based Assessments, SLAR meetings, examples of student work and the Assessment Task.

Classroom-Based Assessments

The introduction of the CBAs in both Science and Business Studies was viewed as largely positive by both teachers and students taking part in student focus groups. Teachers welcomed the opportunities for students to develop skills that might not have been previously facilitated in the subject whilst students reported enjoying the practical aspect of the Classroom-Based Assessment, the agency afforded them in the selection of the topic, and the opportunity to show their learning in different ways.

The students really enjoy doing the CBAs they were engaged and definitely learned loads

Teacher feedback from focus group

I like the fact that you can choose what you want to, and it makes it interesting and it's like how real scientists work

Student feedback from school visit

There was evidence that participating in the CBA experience was transformative for many teachers who reported that their initial experience of the CBA process had impacted on future planning within the subject department and that they were now *more comfortable* with planning for the CBA process for subsequent year groups.

The first year, I found it very stressful and to be honest, I probably stressed the students a bit too. Having been through the process with one-year group I am much more relaxed now and I feel that that is leading to the CBA being much less stressful for students also. It is really just a natural part of what we do when teaching, and students shouldn't feel under a lot of additional pressure

Teacher feedback from school visit

The benefit of ongoing development of skills for the CBAs as part of teaching, learning and assessment was highlighted by both teachers and students in the review. A significant number of teachers view or are beginning to recognise CBAs as a natural part of teaching, learning and assessment whilst others feel that that they have a status beyond ongoing assessment.

In schools where teachers spoke about CBAs as a natural part of teaching, learning and assessment students appeared to be less daunted by the CBA process. On the other hand, there were schools which viewed CBAs as standalone assessment events designed to measure achievement, in some cases going as far as requiring students to complete mock CBAs. It was not uncommon in these schools for both students and teachers to report that they found the CBA process stressful.

Students in these settings spoke of having to complete the CBA at home in addition to having to prepare for Christmas examinations. Teachers in the same settings spoke of their concern that CBAs were *eating into valuable class contact time*

I love the doing the CBAs, but it is so stressful. I have to do all the work at home as well as studying for my mocks and doing revision questions – like – that's a lot to have to do during holidays.

Student feedback from school visit

Both teachers and students of Science and Business Studies expressed concern over the perceived value of the CBAs and there is some appetite to have the CBAs recognised and combined with the results of the final examinations to provide one overall composite descriptor or grade.

It should be a 60-40 split. We are ready for it now- the systems are in place and it would give value to the CBA

Teacher feedback from school visit

Teachers also reflected the view that parents are surprised that CBAs do not count towards a single overall composite result and would like to see the achievement in the CBAs rewarded as part of the final examination grade.

This sentiment came through strongly in the student voice with students reflecting the view that the CBAs should *count towards* their final grade in the subject, as this would reduce the pressure on the final examination and would also reward students in a more significant way for their effort in the CBAs.

They [CBAs] should be worth something we put hours of effort into them. It would be great if they were worth part of your final exam. Then the pressure would not all be on what you write or say in the exam.

Student feedback from school visit

In discussion, teachers referenced the general limitations of *pen and paper* examinations. It was suggested that exploring the possibility of linking the CBAs with the examination captures the spirit of the revised specifications.

The widening of the *window* or time period within which the CBA is conducted was broadly welcomed by teachers. However, there was concern around *access to IT facilities* in school. The use of IT is not mandatory in CBAs in either Business Studies or Science but both teachers and students believe that access to IT makes the CBA more manageable. It allows students to *easily conduct research*, to *access and draw on a range of sources of information* whilst students also *develop digital literacy skills*.

The bigger windows in which to do it are good in one way as it provides more flexibility but challenging in another as there is overlapping of subjects which creates a greater strain on IT resources in schools.

Written submission from BSTAI

The number and spacing of CBAs in general across 2nd and 3rd year came in for discussion throughout the review. Teachers expressed concerns, in some cases speaking from the perspectives of both teacher and parent, that the number of CBAs could become overwhelming when all subjects in junior cycle have been introduced.

Students find CBAs very stressful. They really interfere with their academic year. As teachers we are often unaware of how much extra homework and time and energy goes into CBAs. Also, as more CBAs come online this will cause even more pressure!

Written teacher submission

CBAs are impacting on extra-curricular activities. Matches, sports and other competitions. Teachers don't want students absent from class during the CBA period and this is going to impact badly on extra-curricular activities – surely that is not what we want?

Teacher feedback from focus group

This issue was raised less in settings where the CBA was viewed as part of the everyday business of the classroom. It was also noted that the CBAs differ in nature depending on the subject area and that as subjects within the different phases are introduced, the differing approaches to assessment within the CBA may mediate against concerns around student workload. Schools are also offered the autonomy to develop their own CBA calendars for the year to suit their individual context and mindful of the different CBA formats, such as ongoing portfolio-based work.

Schools taking part in the review outlined different approaches to assessment and the policy relating to ongoing assessment varied significantly from school to school. In some schools, the CBA in 2nd Year replaced a written examination and teachers reported on the CBA that had been completed prior to the term report. In other schools, students sat a formal examination in addition to completing the CBA regardless of the CBA window. There is evidence that in some schools a greater value is placed on written examinations and many teachers expressed the view that that *regular formal examinations and class tests were necessary*, whereas others questioned the need for an increased focus on written assessment and valued the opportunity for students presented by the two CBAs in both subjects.

They really learn loads doing the CBA and it's great to see how motivated they are when they choose the topic themselves

Teacher feedback from focus group

An overview of subject-specific feedback in relation to both CBA 1 and CBA 2 in Business Studies and Science is provided in the commentary below.

Classroom-Based Assessment one

Business Studies

Teachers broadly welcomed CBA1 in Business Studies and noted favourably the opportunity for students to choose from three areas – Enterprise in Action, Finance in Action or Economics in Action. Students also reported liking this element of choice and were generally supported by their teacher in making the choice. Some teachers said that it was difficult to give a complete choice of format as the CBA selected depended on students having enough pre-learning and they benefitted from having engaged with particular learning outcomes. Teachers noted that a change of CBA1 would require a change in planning for learning across both first and second year.

The majority of schools and teachers have been leaning towards enterprise in action in their choice of CBA in the initial years. This observation was also made by the Inspectorate in their report on the initial years of CBA1

It is the inspector's experience to date that there has been an overemphasis on focusing on enterprise in many of the schools visited, however there are geographic patterns evident in this. This is probably to be expected as Enterprise is a key part of the specification and teachers have long experience of engaging with enterprise in TY. There is potential for other options to be considered, so as not to replicate learning for many students who may transition to TY.

Written report from the DES Inspectorate

In terms of skill development, teachers viewed the development of research skills, analysis skills and report-writing skills as beneficial for students and acknowledged these skills would also be useful for students in further life, work and study and in other subject areas.

The focus on skill development is great. All of these skills are life skills that students will need for Leaving Cert, work and further study. These are the skills that students should be developing going forward.

Teacher feedback from school visit

CBA1 is conducted in small groups of 3-5 students. The development of group work skills was viewed as positive in the main, however, teachers highlighted a range of challenges with group-work, including student absences, either intermittently or for a significant period of time; managing the

formation of groups and using the Features of Quality to assess the group CBA yet awarding an individual descriptor

CBA 1 features of quality are very difficult to apply sometimes. 3 out of the 5 features of quality are to do with the group project, yet we are assessing the individual pupil. One ends up trying to speculate/recall the part that pupil may have played in each project even though they have templates to record work. CBA 2 is much easier to apply the features of quality to.

Written teacher submission

In their feedback, submission from DES Business Studies inspectors stated that teachers were reporting a number of concerns to them relating to managing CBA1 in the classroom, issues such as *how do we ensure equity within a group?* and challenges they encountered in helping students to understand the importance of *team work* and *working with others*.

Students also had mixed reactions to the groupwork aspect of the CBA, with some students enjoying the opportunity to work in groups but others expressing dissatisfaction at having to work with others and the associated challenges such as the inequitable division of work within the group.

It's not fair that you can work really hard and someone else doesn't pull their weight it should be individual

Working in groups is great cos we all have different strengths I know we were lucky though cos we all did work but in my friend's group there was one who didn't and that's not fair

Student feedback from school visits

Science

Teachers who participated in this welcome CBA 1, the Extended Experimental Investigation (EEI), and see it as an improvement on the Coursework B component of Junior Certificate Science.

Well we certainly don't want to go back to Coursework B this is much better and the fact that they can choose their own topic means they are all engaged I actually loved doing the EEI

Teacher feedback from school visit

It was acknowledged that the focus on the EEI in second year was instrumental in keeping many students engaged, who might otherwise have disengaged from science learning at this stage. Some teachers, however, noted that the EEI might be best placed in third year when more learning had taken place.

I think the AT would be better on the EEI, but I do like the fact that it's done in 2nd year too it keeps them motivated

Teacher feedback from focus group

My current students are so much better at investigating, thinking like scientists, seeing connections between things. Researching has opened up such fantastic discussions. Old course was boring and just focused on learning off. The CBAs help bring this course to life. Parents delighted too, with opportunity of students to show different skill sets.

Teacher feedback from focus group

A suggestion was made that the EEI could be the second CBA as the Science in Society Investigation (SSI) currently carried out in third year supports the development of a range of skills that would complement and be useful for students when carrying out the EEI.

Teachers in the review also suggested that the EEI and SSI could be combined so that students could complete both CBAs together as one investigation, taking aspects of both CBAs.

Concerns expressed in relation to the students' agency afforded by the EEI related to resources as some schools felt that they did not have access to the range of materials and equipment required by students where the choice and variety of investigation is unrestricted.

EEI was very good. Students embraced it but difficult to have all necessary equipment and access to labs

Written submission from ISTA

Students are very engaged by the Extended Experimental Investigation (EEI). However, it is difficult for the teacher to manage up to twelve different projects in one classroom, especially with forty-minute classes. The EEI also puts a strain on the availability of laboratory equipment and glassware for other classes. For example, a student's EEI could put six glass beakers out of general use for up to three weeks.

Written teacher submission

Other teachers commented on the challenge for some students in developing an idea for the EEI that would allow them to carry out the investigation which would reflect and demonstrate learning against the features of quality.

Classroom-based assessment two

Business Studies

CBA 2 in Business Studies, the Presentation, was widely welcomed by teachers and students alike. Teachers viewed the format of the CBA to be more straightforward than the group based CBA1 and felt that it was more manageable in class. The timing of the CBA was seen as helpful as in third year students have engaged with a range of learning outcomes and can chose an aspect of Business Studies that they have an interest in as the topic for their CBA. The fact that students have wide choice in CBA2 was highlighted as a particular strength of the CBA and this supported students in exploring topics of relevance to their local area or of particular interest to them and also in looking at topics that are related to Business Studies in the media.

CBA2 is great – students really get into the spirit of it and chose topics that are of interest to them, I've heard some really interesting Presentations on different topics, and I've learned a lot myself too

Teacher feedback from focus group

Some discussion took place around the oral presentation format of the CBA, with a small number of teachers and students expressing concern for students who are not comfortable presenting their CBA in front of a group. Where this arose, teachers and schools had found solutions to help students to overcome these issues. Both teachers and students noted that students were more comfortable with presenting in front of a group where they had opportunities to incrementally develop their presentation and oral communication skills.

Students were initially a bit stressed the first time I asked them to present in front of the class, so I decided to get them to do it in small groups, then gradually work up to a bigger audience. With my first years now, I am getting them used to speaking in front of the class so that they are not fazed by the Presentation for the CBA

Teacher feedback from school visit

It was also recognized that CBA2 is an opportunity for students to build on the research skills that they developed as part of CBA1 and also developed in other subjects such as CBA2 in Science. Teachers welcomed this, as did students, as they could see how they were applying their learning across the different subjects.

From talking to colleagues I've learned that students are developing these skills in other subject areas too like English and Science. I think that's good – it is joined up thinking

Teacher feedback from school visit

I learned from doing the CBA communication CBA and I was able to use the skills I learned in doing that when I was doing my Presentation CBA

Student feedback from school visit

Science

Of the two CBAs in Science, the Science in Society Investigation (SSI) completed in third year was considered more challenging for schools and teachers. The main concern for teachers in relation to the CBA was access to digital technology for the research phase.

There is an awful pressure on computers everyone needing them at the same time for CBAs and then the LCAs always need the computer room we have no choice but to tell the kids they have to do the research at home

Written teacher submission

A small number of teachers said that students were not having the opportunity to develop the skills relating to research assessed through the SSI in first and second year and these students struggled to complete the SSI.

Others valued the opportunity afforded by the specification to develop these skills and found the SSI a valuable opportunity for their students to display evidence of this learning.

Developing the skills for the SSI in the students is hugely valuable and gives an opportunity to investigate and learn about relevant issues – if this could be worth something it would be great – students are seeing the importance of science and how it connects to their lives – this is so valuable to students.

Teacher feedback from school visit

The opportunity provided by the SSI to conduct research into an area of science that interests them was highlighted by students in the review:

I like doing the research finding information on both sides of the argument I even changed my mind about the HPV vaccine and got it after my CBA.

Student feedback from school visit

Examples of Student Work

NCCA works on an ongoing basis with teachers across schools to develop and publish examples of student work which is intended to support teacher judgement about the quality of student work. This work is published following a quality assurance (QA) process which involves teachers and colleagues from JCT, SEC and the Inspectorate. These examples of student work are most often used by teachers to support discussions during SLAR meetings where there maybe uncertainty around the descriptor awarded to a particular piece of student work.

Teachers reported that they found the annotated examples of student work published on www.curriculumonline.ie very helpful. Where examples of work are used to support discussions at SLAR meetings teachers reflected that they help *to develop confidence in applying descriptors to student work*. Some teachers also used the examples of work to support their own assessment of a piece of work and found them particularly helpful when familiarising themselves with CBAs and the Features of Quality applied to the student work. The annotations accompanying the work were highlighted as being particularly helpful in this respect.

The samples are great they give you confidence to stand by your judgement at the SLAR meeting

When you are confused about how to judge the piece the annotations are very helpful, and they help you to see why the sample has reached a certain descriptor

Teacher feedback from focus groups

Throughout the review, teachers spoke about the need to refresh the examples regularly and there was evidence of an understanding that standards *would evolve* as teachers become more comfortable with planning for teaching and learning using the specification.

I think it's great that new samples go up every year because what is In Line With Expectations now should change in a few years when we get the hang of how-to bring CBA style learning more into our classroom.

Teacher feedback from focus group

Business Studies teachers in particular would like to see examples that exemplify learning across the three strands and a variety of examples for the CBA1 where there is the aforementioned choice of topics.

We need to see more samples of Finance in Action and Economics in action to get an idea of what is required of students.

Teacher feedback from focus group

There was mixed reporting in relation to engagement with the First-Year examples of student work. Some teachers made no comment on these examples as they hadn't engaged with them while others spoke about how the examples gave them ideas about planning for a different type of learning and said that they found the examples useful in planning for teaching, assessment and learning.

I looked at those samples from first year all right but didn't really gain anything from them it was the CBAs that we used although I might go back to look at the first year work now as they would probably give a good idea of what we could do with the learning outcomes

Teacher feedback from focus group

A cross-section of teachers felt that it might be useful to have examples of work from second and third year that are not CBA-related as these would help teachers in planning for learning using the learning outcomes and in seeing what potential is offered for ongoing assessment within the learning outcomes.

The samples are great, and it would be great to have more, not just CBAs but samples from 2nd and 3rd year. That would help our understanding of the Learning Outcomes, especially if the work has been part to the QA process that you described.

Teacher feedback from school visit

The use of the examples of work during CPD was highlighted as beneficial for teacher professional development. During the review, teachers spoke of the importance of being able *to look at the examples of work that are online and discuss them with colleagues* and felt that these discussions were of benefit in developing *greater confidence* around working with features of quality and in working with the learning outcomes in general.

It was great at CPD when we got time to look at some of the samples of work from curriculum online and discuss the sample and the descriptor awarded. I'd like to do more of that.

Teacher feedback from focus group

Teachers participating in the review from gaelcholáistí and Gaeltacht schools highlighted the lack of examples showing student work from these settings. This was seen as particularly important for subjects with a subject-specific vocabulary, such as Business Studies and Science. Teachers in these

schools would welcome examples where students are learning and presenting their work through Irish. This would be of particular benefit to the discussions at SLAR meetings.

Subject, Learning and Assessment Review (SLAR) Meetings

Teachers of Business Studies and Science participate in a SLAR meeting after both CBA1 and CBA2. Throughout the review, the SLAR process was highlighted as one of the most positive aspects of the reform and was seen as contributing to the development of a more collaborative culture in subject departments. Teachers highlighted how SLAR meetings provide *valuable time* and space for *collaboration, foster professional discussions around teaching learning and assessment* and future *planning for teaching, learning and assessment* and also support the development of teacher confidence around standards and applying features of quality.

SLAR meetings were also seen by teachers as useful in terms of supporting what was described as *collective sense-making* of the dual approach to assessment introduced as part of the Framework for Junior Cycle.

I do like the SLAR process – it is good for discussing standards but really useful for seeing how other teachers in my department are approaching the CBAs. A lot of what we discuss in SLARs becomes part of what we discuss at our departmental planning meetings

Teacher feedback from school visit

Teachers generally found the experience of participating in SLAR meetings interesting and there is agreement that it provides opportunities for good professional dialogue.

Written submission from BSTAI

The Features of Quality, the samples online and the SLARs really help you get confident in awarding the descriptor. It wasn't easy the first time and I think we were all very nervous but once you get comfortable and trust yourself you get more confident

Teacher feedback from focus group

I enjoyed the SLAR meeting, it gave members within the dept time to discuss methodologies and give critical feedback about their students' work.

Written teacher submission

A cross-section of teachers taking part in the review noted that discussions at the SLAR meetings fed into practice around planning for teaching, assessment and learning and that discussions at the SLAR meetings were informing how teachers planned for teaching and learning in their own classrooms. This was valued by teachers and seen as a process that helped to develop collegiality and collaborative practice.

Before SLARs we didn't really discuss student work – we did talk a bit about planning and stuff but not student work, and I think that this is helping us to work together better as a subject department.

At the SLAR everyone has an equal voice. I like that – it doesn't matter how much experience you have; everyone's opinion is valuable.

Teacher feedback from school visit

The training available for SLAR facilitators was seen as very valuable and a number of teachers who had assumed the role of SLAR facilitator found that the training increased their confidence in the role. This training is provided on an elective basis by JCT with a two-hour evening session provided annually in education centres around the country

The training for SLAR facilitators, although it was in your own time was good. I got good ideas on how to approach the role and it was less daunting for me after attending the training.

Teacher feedback from school visit

Whilst aimed at those who are assuming the role of facilitator in the SLAR meeting, it was suggested that this training would be of benefit to all of those participating in the SLAR meeting as it supports the development of conducive conditions for discussing student work. SLAR meetings are seen as most successful where there is a skilled facilitator who supports the development of professionalism and mutual respect and where the two hours allocated for the meeting is *agreed and planned for in advance*. Subject departments found it useful to set the date for their SLAR meeting in advance of beginning the CBA to ensure that all colleagues could plan for and be prepared for the agreed date.

The review found mixed approaches to the organisation of SLAR meetings in schools. Some teachers reported bundling professional time to provide a 2-hour time slot outside of the school day. Others reported a *half-in, half out* scenario with the SLAR meeting beginning within the school day and continuing beyond the end of the school day. At the time at which the consultation was open, issues around the timing of SLAR meetings were a source of unease within the system and teachers sought to have clarification around the timing of SLAR meetings.

Preparation for the SLAR meeting was seen by some teachers as onerous especially for CBA1 in Business Studies as there can be a lot of material involved because it is a group project and can be presented in a variety of formats.

The facilitator should 'collect and copy' samples of work submitted by teachers. This may require the photocopying of sample work or scanning - difficult if you don't have a school-provided device. We feel it is doubly unnecessary, a huge amount of work and a waste of paper. It is also not in line with our sustainability approach.

Written submission from BSTAI

When further investigating this concern in focus group discussions teachers report the use of online platforms to reduce the need for photocopying.

As detailed previously, the examples of student work available on curriculumonline.ie were seen as useful in the SLAR process to support teachers in arriving at a shared sense of standard and it was felt that it would be useful to have a greater number of examples available at a range of descriptors.

There were some concerns from teachers about standards in terms of the descriptors awarded. In some cases, schools have reported disagreements around descriptors leading to concerns about ensuring a national standard.

The samples of student work are useful, and we do look at them from time to time, but I'd like to see a greater variety. It would be good to have a greater range which would help as sometimes the standards are unclear from the examples provided

Teacher feedback from focus group

Within schools there were disagreements regarding awarding descriptors, which causes us concern about the standardisation of this process nationally

Written submission from BSTAI

Assessment Task

The Assessment Task (AT) in both Business Studies and Science is linked to the student experience of CBA2. The AT is reflective in nature and teachers felt that student reflection skills have developed due to this renewed focus on reflection both in the AT and within the key skills and CBAs. However, across the review, a number of issues and concerns relating to the AT were raised.

The main concern around the AT questioned the educational value of the task. In some cases, teachers felt that the task was *replicating the work within the CBA with prompts that mirrored the requirements of the CBA*. In other cases, both teachers and students questioned the link between the AT and the CBA, with some teachers feeling that there was *not enough connection between the AT and the subject specification*. Teachers also expressed concern around the marking of the AT feeling unsure of the criteria used to assess the student reflections.

The submission from the JCT team reported similar concerns from teachers attending their workshops.

Generally, our experience has been such that we believe that teachers don't see a value in the Assessment Task. Some see merit in the Assessment Task but very many are unsure of the success criteria for full marks to be achieved. Many speak of a frustration at not being able to guide students through the process and gain full marks available. Few are entirely positive towards it and some are very critical, expressing concern that student reflection alone is being used as a crude basis for assessment. Many teachers have expressed a lack of confidence about how best they can prepare their students for the Assessment Task.

JCT Support Service

Many teachers reported feeling reassured having seen the SEC marking scheme for the Assessment Task.

The timing of the Assessment Task (AT) in 2019-2020 was noted as a cause for concern by the Business Studies Teachers Association of Ireland (BSTAI)

The Assessment Task template being unavailable until January even though some schools have started their CBAs is very unfair on both teachers and students - teachers were only informed of this after CBA 2 calendars for 2019/20 were set in schools. Students should be able to reflect on their CBA immediately after completing it, not many weeks later. This is especially unfair as this is worth 10% of their final grade.

Written submission from BSTAI

This concern was echoed by some teachers who had planned for their students to complete the CBA early in the completion window.

The availability of the AT was an issue- we planned as a staff for when the CBAs would take place to ensure that students would not be overloaded but then we discovered that there was going to be a gap between them finishing the CBA and getting to do the AT. That's a complete lack of joined-up thinking

Teacher feedback from focus group

It appears that awarding 10% for the Assessment Task has had a negative impact on the perceived value of the CBAs with teachers observing that this has led to an incorrect assumption amongst students and parents that CBA2 *is only worth 10%*. Teachers report finding it difficult to explain the 10% awarded for the AT to parents.

It's hard to explain what the 10% is for- and that it is only related to CBA2. Parents and sometimes students then ask about CBA1 and what that is 'worth'. I can't understand why there is an AT for one CBA and not for the other...or even why there is one at all.

Teacher feedback from school visit

I don't get why there is an Assessment Task for CBA2 but CBA1 is worth nothing. That is annoying because we put in so much work in our group and it is not even worth 10%

Student feedback from school visit

Whilst some viewed it as self-evident that students must have engaged with learning first in order to be able to think about, speak about and reflect on that learning, teachers reported mixed messages in schools around this, speaking of schools who had not allowed students to do the AT without having submitted CBA2 where others had allowed students to proceed.

Final Examination

There was mixed reaction to the final examination in both Business Studies and Science. The booklet-style examination paper in both subjects was welcomed as was the higher order questioning mentioned earlier. The final examination in both Business Studies and Science has shifted from a separate higher and ordinary level paper to a common level examination. Many teachers suggested that the questioning on the common level paper did not provide all students across the full range of ability and achievement with opportunities to fully display their learning.

Common level exam is not working for several pupils. The gifted pupil is not challenged due to the lack of depth while the exam is not as accessible as the old OL course for the weakest pupils. This goes against the concept of wellbeing proposed and the idea of differentiated assessment.

Teachers reported needing more support in relation to motivating students in the context of inclusive teaching, learning and assessment practices.

Weaker students won't read through charts or diagrams to try to work out the answer and more able students need questions that challenge them

Teacher feedback from school visit

The lack of choice between questions on the examination paper was queried by both teachers and students Business Studies teachers suggested that the lack of choice was magnified by the shift to common level and by moving from two papers at Higher level to one two-hour paper. Previously students had choice on both papers and could 'play to their individual strengths'

The lack of choice in questions for students. The option on some of the short questions in the previous exam (up to 2018) to answer (a) or (b) was welcomed by both students and teachers. Something similar in the new exam would be similarly welcomed.

Written submission from BSTAI

It was suggested that the absence of choice particularly impacts on weaker students and this concern was conveyed to the JCT team.

Some teachers, in DEIS schools in particular, have mentioned that some students have struggled with aspects of assessment- most notably the final exam and particularly with respect to the lack of optional questions

JCT Support Service

Teachers and students also expressed concern around how difficult it was to understand the detail required in response to examination questions. The lack of breakdown of marks on the paper was mentioned as an issue in this context.

I have an issue with the style of questioning - no indication of how much detail was required or how many points they needed to give to get full marks.

Teacher feedback from school visit

I was kind of trying to guess how much to write- the questions seemed simple enough but then when I got out and I got my grade I was like, I'm not really sure if I wrote enough but I had no idea in there

Student feedback from school visit

Teachers spoke about the provision of sample exam papers for the first cycle of teaching the course. It suggested more than one sample paper would have supported teachers and students in gaining insights into the possible styles and types of questions

The provision of a number of sample exam papers well in advance of commencement of teaching the course would go a long way to making for satisfactory working conditions for students and teachers.

Written teacher submission

The ISTA expressed frustration about the increase in marks awarded for the final exam. Previously, the coursework component of Junior Certificate Science accounted for 35% of overall marks.

Some students will be really stretching themselves to complete the EEI and still will not manage to achieve. I am also disappointed that the terminal exam in the JC accounts for more of the marks to form a grade than the previous exam. Previously the JC exam accounted for 65% of the grade. We probably shouldn't be so focused on the grade, but anything which relieves pressure and stress on students in my opinion [is good]

Written submission from ISTA

Science teachers said that the experience of the first cycle and seeing the format of the exam and style of questions led them to revise their planning

We'll do things differently next year I think my students need more experience in analysing data ...looking at information they have never seen before and answering questions...this is new to them and they need to learn how to do it

Teacher feedback from focus group

Reporting

The renewed focus on reporting a broad picture of achievement coupled with an emphasis on feedback in junior cycle was widely welcomed by teachers participating in the review. Some teachers expressed the belief that this renewed focus was simply acknowledging the *good practice* already evident in schools around the country, whilst others said that it had prompted them to place an extra emphasis on providing feedback opportunities to students on how to move forward in their learning.

The timing of the release of the Junior Cycle Profile of Achievement (JCPA) as separate from the SEC results was criticised and is seen as one of the factors that contributes to the undervaluing of the CBAs.

By the time they get the JCPA they have forgotten about JC and the CBAs the only thing that is important is what they get from the SEC why can't their CBA mark be included on this

Teacher feedback from school visit

Teachers noted that the JCPA has the potential to really add value to different types of learning and mark a celebration of the end of junior cycle but again timing prevented the realisation of this potential.

It's just farcical at the moment nobody values it - by the time they get it they have moved on. They need to get it earlier, same time as the exam results.

Parents don't get what's going on with it either. They don't really understand why they get the two sets of results. As a parent myself I see huge value in the JCPA and the wider picture of learning but our culture here in Ireland is examination results.

Teacher feedback from focus group

The timing also impacted on inclusion and equity as students who engage with Level 2 Learning Programmes do not receive anything from the SEC with their peers. There is a perception that their achievements are being undervalued.

I feel sorry for the kids who do level 2 and their parents they get nothing in September and have to wait months for the JCPA what does this say about them?

Teacher feedback from focus group

The language of the descriptors used to report on the CBA was a cause of concern for some teachers in particular the *Yet to meet expectations* descriptor.

Yet to meet expectations is not an appropriate way to describe student learning. In a time where we are placing huge emphasis on student wellbeing and a growth mindset this is not at all how we should report on learning

Teacher feedback from focus group

There was evidence of a lack of understanding in relation to standards and the awarding of the descriptors with some believing that the descriptor was used to describe the student as opposed to the piece of work.

The label 'yet to meet expectations' is not a positive label to give to a student who has given their best efforts but due to learning disabilities or other circumstances does not achieve the 'in line with expectation' criteria. The features of quality for SSI are very blurred and subjective - I do not see how this enables all students across the national cohort to be assessed equally

Written submission from ISTA

The new grading system used to report on final examinations in junior cycle was not popular amongst teachers or parents who had concerns about the wide grading bands, with *higher merit* causing most concern. Many teachers indicated a preference for a grading system that would discriminate more between achievement.

The higher merit band is far too wide. Students are frustrated by it and parents find it difficult to understand. It doesn't tell a student a lot about their learning because the band is so wide, and it is unfair on students who are towards the higher end of the band

Teacher feedback from focus group

I find the higher merit band frustrating. It is far too wide. The range of the band does not help. It needs to be changed. I don't know why the band was made so wide to begin with. Students getting 74% get the same grade as students getting 55%.

Teacher feedback from school visit

Students who had completed final examinations in the three new junior cycle subjects of English, Business Studies and Science also expressed their dissatisfaction with this particular grade band. Their perception seemed to be that there should be a direct correlation between the amount of effort you put in and the descriptor used to describe the achievement.

It's not fair when you did so much work and you get the same mark as someone who didn't work as hard as you

Student feedback from school visit

Teachers in both the focus groups and school visits expressed concern about the low number of *distinction* grades achieved in both the Business Studies and Science examinations in 2019 compared to the number of A-grades awarded in 2018, despite the acknowledgement that the distinction grading band (90%+) was narrower than the previous A-grade in junior certificate (85%+).

Teachers noted that parents and students familiar with the old grading system were unclear on what the descriptors meant.

We have changed the way we communicate and report on learning to parents. However, I feel that parents are not very clear on this new system. I also feel from listening to my own students on the day of the results there is less respect from both parents and students for the results of the subjects where they are not getting an A, B, C style grade.

Written teacher submission

In the focus groups teachers acknowledged that this situation would improve as the years progressed.

It's like changing from miles to km you think in miles for a while until you get used to it

Teacher feedback from focus group

Additional areas of discussion

All aspects of the consultation yielded very rich and useful feedback. Below are the areas of feedback received that did not align with the main themes reported above.

Transition to senior cycle

Transition to senior cycle was an area of much discussion during the early insights review. Teachers in both Science and Business Studies highlighted both positive and challenging aspects of the transition to senior cycle for students. In both subject areas, there is an awareness of the need to align any developments at senior cycle with the revised junior cycle. In relation to the wide grade boundaries and the small proportion of distinctions awarded by the SEC in both subjects, teachers spoke about the perceived difficulty of the subjects with many fearing a negative impact on the uptake of their subject at senior cycle.

Before kids could say I got an A in this I'm good at it I'll take it for LC now they will think I'm not good at this I only got a higher merit I won't take it for LC

Teacher feedback from focus group

In terms of Business Studies, as mentioned earlier in this review concern over the uptake of business-related subjects at senior cycle was particularly strong amongst teachers of Accounting who also said that the revised junior cycle didn't adequately prepare students for senior cycle Accounting and that Leaving Certificate Economics would appeal more to junior cycle students.

In both subject areas, there is an awareness of the need to align any developments at senior cycle with the revised junior cycle, in this context, LC Accounting was often referenced. A concern about the reduction in accountancy-related content in the Business Studies specification dominated some focus group discussions. Again, this was linked to the potential impact of JC Business Studies on the uptake of Accounting as a senior cycle subject. Teachers are apprehensive about the level of prior knowledge of Accounting practice amongst students that choose Accounting as a leaving certificate subject and the subsequent impact of this on teaching and learning of Accounting in senior cycle.

In some cases this did not present a challenge for teachers and they highlighted measures taken in their schools to address these concerns, including placing a focus in CBA1 on the Finance in Action option and in developing modules for Transition Year (TY) to further develop students' knowledge, understanding and skills in accounting practices.

Interestingly in relation to subject choice when students were asked about the factors which influence their decision when choosing subjects at senior cycle, they suggested that the teacher was the most significant factor, followed by a desire to keep their options open.

I chose Physics cos I had [teacher name] in TY I loved his classes and found them very interesting

I wanted to choose a Science subject to keep my options open

I'm doing Business because [teacher name] is sound

I needed to keep my options open, so I chose Biology it's the easiest of the sciences and my sister said if you learn it well, you'll do well

Student feedback from school visit

Supports as Gaeilge

Teachers teaching in both gaelcholáistí and Gaeltacht schools spoke about access to resources. The majority of additional supports developed for junior cycle outside of core CPD provision are only available through English and teachers believe that access to these supports *as Gaeilge* would support teaching, learning and assessment in these schools

Tá se deachair teacht ar achmhainní – tá siad ar fáil as Bearla ach níl siad ann as Gaeilge. Tá easpa achmhainní ann cinnte – ba mhaith linn níos mó tacaíocht

It is hard to get resources through Irish- there are lots there in English, but the equivalent resources aren't there in Irish. There is a lack of resources and we would like more support

Teacher feedback from school visit

JCSP Programme

Teachers with experience of the JCSP programme and using the new specifications to plan for teaching, learning and assessment within the JCSP programme would welcome a revisiting of the draft JCSP statements. Some teachers suggested that they felt that the JCSP as a programme could be subsumed into junior cycle and mentioned how they saw it had evolved into *more of a support* as the new junior cycle encourages the type of engagement espoused by JCSP.

Communicating with parents

Challenges in communicating with parents in the light of changes to junior cycle were highlighted by both Business Studies and Science teachers. The new approaches to assessment with CBAs, the Assessment task and the final examination all seen as confusing for parents, with teachers finding it difficult to ensure that parents could see the value in the CBAs even though they did not form part of the final grade in the examination.

It is impossible to explain to parents and it is so important that parents see the value in CBAs. Explaining that they are not worth a percentage is very difficult.

Teacher feedback from school visit

Many teachers felt that this was compounded by the use of different language in reporting on student achievement in both the CBAs and the final examination. Teachers also said that parents were concerned about the wide grade bands in the final examination and about the low number of distinctions achieved by students in the final examination.

Next steps

This review gathered feedback and insights from teachers, students and stakeholders after the first cohort of students completed the Junior Cycle Business Studies and Science specifications which are the two subjects in phase two of the implementation of the Framework for Junior Cycle (2015).

Whilst the feedback has been presented in this report through the lens of four main themes, this section of the report considers the feedback, explored under two headings:

- Feedback related to the specifications for JC Business Studies and Science
- Feedback related to the Framework for Junior Cycle (2015).

Feedback related to the specifications for JC Business Studies and Science

Feedback suggests that the new specifications have been broadly welcomed. However, for many teachers the main challenges relate to using specifications written in terms of learning outcomes to plan for teaching and learning with their students. The review highlighted the various experiences of teachers and schools in enacting the specifications in their classrooms and in adapting their practice, as appropriate, to reflect the vision for learning set out in the Framework (2015).

NCCA will liaise with the JCT to provide further clarification which will seek to address teacher concerns in terms of planning for teaching and learning with learning outcomes, whilst still ensuring that teachers and schools have the autonomy to plan for learning related to their local context.

To address the concerns of teachers working in Gaelcholáistí and Gaeltacht schools, NCCA will continue to work with schools in this sector as part of the QA process to endeavour to publish samples of work trí Ghaeilge. Irish translations of the teacher annotations on existing CBA work gathered from English-medium schools will be available on Curriculum Online.

Concerns around progression from junior cycle to senior cycle will be addressed as part of the actions arising from the review of senior cycle, and the ongoing re-development of curriculum specifications in senior cycle. Leaving Certificate Physics, Chemistry and Biology are currently under review. In this context, specific attention will be given to addressing the challenges highlighted by teachers in terms of working with learning outcomes to plan for teaching and learning with their students. A new

specification for Leaving Certificate Economics was introduced in schools in 2019 and is aligned to the junior cycle Business Studies specification. Actions arising from the review of senior cycle are likely to include a schedule of curriculum development, identifying and prioritising senior cycle curriculum components and areas for review. In this context, LC Accounting and LC Business may be considered.

A longitudinal research study on the evaluation of the impact of introduction of the Framework for Junior Cycle (2015) is due to commence in 2020, Q3. The insights from early enactment revealed in this report will inform the longitudinal research study. This presents an ideal opportunity for the NCCA to explore in more detail how schools effectively align teaching, learning, assessment and reporting, and the challenges they encounter in doing so. This could include, amongst other aspects, a focus on how these schools use the published subject specification documents and assessment guidelines to plan for teaching, learning, assessment and reporting.

Feedback related to the Framework for Junior Cycle (2015)

Feedback from the review also referenced the wider implementation of the Framework for Junior Cycle. These concerns need to be considered in tandem with implications arising from the Early Insights Review of English. The feedback set out below is reported for consideration by all stakeholders involved in the implementation of the Framework for Junior Cycle, and it will inform the longitudinal research study on the evaluation of the impact of introduction of the Framework for Junior Cycle (2015).

Professional time

Professional time for teachers was introduced to support schools in their enactment of the Framework for Junior Cycle. This time is valued by teachers in supporting planning for teaching, learning and assessment and is used in different ways in different schools. Teachers attending the focus group sessions commented positively on the opportunity to share their experience of professional time and some exemplification of effective practice around the use of professional time may be a useful additional support for schools and teachers in planning professional time.

Support for Parents

An information campaign for parents to support them in understanding the new assessment approaches and grading system for both CBAs and the final examination would be welcome. This could be disseminated through both the National Parents Council and the schools themselves through

parent information evenings, parent-teacher meetings and as printed or digital information which can be enclosed with school reports and other communications with parents.

Classroom-Based Assessment

The broader approach to assessment in Junior Cycle although welcomed by teachers is not without challenges. Some of the concerns relating to the CBAs noted in this report relate to the value placed on them by teachers at different points on the change continuum. There were also a number of concerns related to the administration of the CBAs.

The volume and spacing of CBAs as more junior cycle subjects are introduced was flagged as requiring careful consideration and planning in schools in this review. The wider completion window was welcomed, but there is a need for schools to continue to plan their assessment calendars to ensure that students are not over-burdened. The nature of the CBA should be considered in planning the calendar, with a particular focus on process-based CBAs to ensure that the CBAs are spread across the broad window allocated for completion of the CBAs. School leaders have received support through the JCT support service in planning their assessment calendar and it may be useful to revisit such supports and guidance with the increase in the number of new specifications introduced in schools.

Access to IT in schools is viewed as an important support for students as they work on their CBAs and other projects across junior and senior cycle, and for FET provision in some schools. The Assessment Guidelines do not specify that IT must be used in the completion of the CBAs, but teachers said that their students find it useful to access IT for research and for ease of production and safe storage of word documents and presentation-based work. Schools currently receive a grant towards IT under the Digital Strategy for schools. It is suggested that stakeholders work together to provide guidance for schools in best using this grant to support student access to IT.

Some teachers and students suggested that achievement in CBAs should be combined with the final examination mark to form one composite grade for the subject. However, it is important to note that this view was not unanimous and would need to be considered carefully in light of the fact that the separation of teacher judgements and SEC judgements was a core component of the compromise that resolved the earlier industrial relations dispute, and to ensure that the pressure on students is not increased as a consequence. Bringing forward the release of the JCPA could place increased value on the CBAs without awarding a percentage of the final mark to the CBAs.

Assessment Task

Reservations have been expressed about the purpose and value of the Assessment Task. This echoes the finding of a previous report into the early enactment of junior cycle English in schools and the future role, if any, of the Assessment Task should be carefully considered.

SLAR Meetings

As detailed in the report, a positive emerging from the SLAR process is the opportunity it presents for teacher collaboration which is widely welcomed by teachers. The recently issued clarification around the timing of such meetings should answer the questions raised by teachers during this review.

Final Examination

The shift to a common level examination (with a single exam paper in the case of Business Studies) has been somewhat challenging for teachers. It may be helpful to provide a clearer explanation for the rationale for moving from two levels (higher and ordinary) to common level.

The wide grading bands at Higher Merit and Merit were criticised in addition to the narrow Distinction band, as it reduces the numbers of student awarded the highest level of achievement. In this review, the view was expressed that the Higher Merit band is unfair on students who might previously have achieved an 'A' grade with 85% but now receive the same grade as a student achieving 75%.

Junior Cycle Profile of Achievement

The timing of the release of the JCPA was widely criticised throughout the review. There was a desire for the JCPA to be available on the same date as the results of the state examinations as it would provide a broader picture of student learning for parents. This would also recognise the achievements of students undertaking Level 2 Learning Programmes at the same time as their peers.

Appendix One

School visits for review

School A	Voluntary, co-educational
School B	ETB, co-educational, DEIS status, offering JCSP
School C	Community/Comprehensive, co-educational, DEIS status, offering JCSP
School D	Voluntary co-educational
School E	Voluntary single-sex school
School F	ETB, co-educational, Gaelcholáiste

Appendix Two

Agenda for Facilitators – Early insights review of junior cycle Business Studies and Science (Phase 2) Additional insights from English (Phase 1)		
<p>The session will be foregrounded by the vision for Junior Cycle. This vision encapsulates what is important for an average 15-year old to be able to know, understand, value and be able to do at the end of junior cycle. Today’s session is about taking feedback from participants on how well the various parts of the specification align to this vision for Junior Cycle and how the assessment elements, (including examples of student work, CBAs, SLARs and reporting) support this.</p>		
10.30am	Welcome and introductions	<p>Ask participants to introduce themselves and their school/organisation</p> <p>Remind participants of ground rules:</p> <ul style="list-style-type: none"> • Timing – packed agenda, need to follow agenda timings as far as possible • The process: recording views and taking feedback – not answering questions, making decisions, explaining or clarifying • No comments recorded will be attributed to any individual or school • Everyone's voice should be heard
Specification, planning and task design		
10.40am	<p>Q1. Does the Specification clearly articulate what it is important for students to know, understand, value and be able to do across the three years of junior cycle? Are there any omissions?</p> <p>Q2. What opportunities and challenges have you and your subject department experienced in using learning outcomes to plan for teaching, learning,</p>	<p>Facilitators pose the key question and take notes.</p> <p><i>If necessary, facilitators will direct participants to the Learning Outcomes section of the Specification</i></p> <p>English: Business Studies Science:</p> <p>Facilitators pose questions re: planning and take notes</p>

	assessment and reporting? What are you doing differently as a teacher/ subject department?	
Examples of student work		
11.20am	Q3. How have you used the Examples of Student Work published on www.curriculumonline.ie ? Do you have any observations or suggestions?	Facilitators pose the key question and take notes
Classroom-Based Assessment 1 and 2		
11.40am	Q4. What have been the main successes and challenges so far? Have you any feedback on the both CBAs are articulated in the Assessment Guidelines	Facilitators pose the key question and take notes Facilitators pose the follow up question. <i>If necessary, give participants a copy of the Assessment Guidelines</i> English: Business Studies Science: Facilitators pose the key question and take notes
12.00-12.20 pm Stretch Break – Coffee/ Tea available		
Classroom-Based Assessment 2:		
12.20pm	Q5. What feedback do you have on the experience of participating in Subject Learning and Assessment Review meetings? (for both CBAs)	Facilitators pose the key question and take notes
Assessment Task		

12.40apm	Q6 What have been the main successes and challenges in relation to the Assessment Task so far?	Facilitators pose the key question and take notes <i>If necessary, provide a copy of the Assessment Task.</i>
Final exam		
1.00pm	Q7. What have been the main successes and challenges in relation to the Final Exam so far?	Facilitators pose the key question and take notes <i>If necessary, provide a copy of the exam papers.</i>
Additional questions on a group basis: 1.20pm-1.40pm		
Reporting Table 1 + 2	Key skills Table 3 + 4+5	English Text Lists Tables 6 + 7
Q 8: Has the new Junior Cycle changed the way you communicate and report on learning and achievement to students and parents? Facilitators pose the key question and take notes. <i>If necessary, provide a copy of the sample JCPA</i>	Q 9 To what extent does student learning in Junior Cycle help students to develop the key skills outlined in the Framework for Junior Cycle? Facilitators pose the key question and take notes.	Q 11 Do the course overview and text list offer clarity in the range of texts to be explored and the choices available to teachers/students? Facilitators pose the key question and take notes. <i>If necessary, provide a copy of the current text list</i>
1.40pm Thanks and Light Lunch		

Teacher consultation events

Cork	12 th November 2019
Galway	18 th November 2019
Dublin	5 th December 2019

Appendix Three



Template for written feedback on Junior Cycle Business Studies

As each subject in the new Junior Cycle is completed by one full cohort of students, an interim review of the subject specification and related assessments will be carried out by the NCCA.

In order to gain an insight into the experience of enacting the new Junior Cycle in schools, we are inviting feedback from teachers, students, parents and others (e.g. subject associations, initial teacher educators) on the specification for Junior Cycle Business Studies

Four broad questions are shaping this review:

- Does the specification get to the heart of what we value about Business Studies as a subject?
- Does it support the learning aspired to within the Framework for Junior Cycle?
- How well are assessment and reporting capturing this broader picture of student learning?
- What opportunities – and challenges – are schools/teachers/students experiencing as the specification is enacted in practice?

The discussion prompts below go into greater detail in each of these areas. If you wish to provide written feedback on Junior Cycle Business Studies, please use the prompts below and return your written feedback by email to consultations@ncca.ie marked Junior Cycle Business Studies Feedback in the subject line, by Wednesday 11th December 2019

Learning outcomes:

- Do the learning outcomes articulate what we want students to know, understand and be able to do across the three years of their junior cycle? Are there any omissions? Any specific learning outcomes which are unclear/problematic?

Planning and task design:

- What opportunities and challenges have you and your subject department experienced in using learning outcomes to plan for teaching, learning, assessment and reporting?
- Do you have any feedback in relation to clarifying learning intentions; designing units of work and tasks; and using success criteria to have conversations with students about their learning?

Inclusion:

- In your view, how well do the specification and assessments take account of the entire continuum of ability and experience? Opportunities? Challenges?
- Do you have any feedback on integrating the Junior Cycle Business Studies specification with Level 2 learning programmes and/or the JCSP approach?

Examples of student work:

- How have you used the Examples of Student work published on www.curriculumonline.ie? Do you have any observations or suggestions?

Classroom-Based Assessment 1: Business in Action:

- What have been the main successes and challenges so far?
- Have you any feedback on the way *Business in Action* is articulated in the Assessment Guidelines (p8-18)?
- What feedback do you have on the experience of participating in Subject Learning and Assessment Review meetings? (for both CBAs)

Classroom-Based Assessment 2: Presentation:

- What have been the main successes and challenges so far?
- Have you any feedback on the way the *Presentation* is articulated in the Assessment Guidelines (p20-25)?

Assessment Task:

- What have been the main successes and challenges so far in engaging with the Assessment Task?

Final exam:

- What have been the main successes and challenges so far in relation to the final exam?

Reporting:

- Has the new Junior Cycle changed the way you communicate and report on learning and achievement to students and parents?
- What opportunities and challenges have you encountered?

Key skills:

- To what extent does student learning in Junior Cycle Business Studies help students to develop the key skills outlined in the Framework for Junior Cycle?

Transition to Senior Cycle:

- To what extent does student learning in Junior Cycle Business Studies create learners who can transition to the demands of Senior Cycle Accounting, Business and Economics?



Template for written feedback on Junior Cycle Science

As each subject in the new Junior Cycle is completed by one full cohort of students, an interim review of the subject specification and related assessments will be carried out by the NCCA.

In order to gain an insight into the experience of enacting the new Junior Cycle in schools, we are inviting feedback from teachers, students, parents and others (e.g. subject associations, initial teacher educators) on the specification for Junior Cycle Science

Four broad questions are shaping this review:

- Does the specification get to the heart of what we value about Science as a subject?
- Does it support the learning aspired to within the Framework for Junior Cycle?
- How well are assessment and reporting capturing this broader picture of student learning?
- What opportunities – and challenges – are schools/teachers/students experiencing as the specification is enacted in practice?

The discussion prompts below go into greater detail in each of these areas. If you wish to provide written feedback on Junior Cycle Science please use the prompts below and return your written feedback by email to consultations@ncca.ie marked Junior Cycle Science

Feedback in the subject line, by Wednesday 11th December 2019

Learning outcomes:

- Do the learning outcomes articulate what we want students to know, understand and be able to do across the three years of their junior cycle? Are there any omissions? Any specific learning outcomes which are unclear/problematic?

Planning and task design:

- What opportunities and challenges have you and your subject department experienced in using learning outcomes to plan for teaching, learning, assessment and reporting?
- Do you have any feedback in relation to clarifying learning intentions; designing units of work and tasks; and using success criteria to have conversations with students about their learning?

Inclusion:

- In your view, how well do the specification and assessments take account of the entire continuum of ability and experience? Opportunities? Challenges?
- Do you have any feedback on integrating the Junior Cycle Science specification with Level 2 learning programmes and/or the JCSP approach?

Examples of student work:

- How have you used the Examples of Student work published on www.curriculumonline.ie? Do you have any observations or suggestions?

Classroom-Based Assessment 1: Extended Experimental Investigation

- What have been the main successes and challenges so far?
- Have you any feedback on the way the *Extended Experimental Investigation* is articulated in the Assessment Guidelines (p 12-20)?
- What feedback do you have on the experience of participating in Subject Learning and Assessment Review meetings? (for both CBAs)

Classroom-Based Assessment 2: Science in Society

- What have been the main successes and challenges so far?
- Have you any feedback on the way the *Science in Society* is articulated in the Assessment Guidelines (p 23-32)?

Assessment Task:

- What have been the main successes and challenges so far in engaging with the Assessment Task?

Final exam:

- What have been the main successes and challenges so far in relation to the final exam?

Reporting:

- Has the new Junior Cycle changed the way you communicate and report on learning and achievement to students and parents?
- What opportunities and challenges have you encountered?

Key skills:

- To what extent does student learning in Junior Cycle Science help students to develop the key skills outlined in the Framework for Junior Cycle?

Transition to Senior Cycle:

- To what extent does student learning in Junior Cycle Science create learners who can transition to the demands of Senior Cycle Science subjects

Appendix Four

Course overview for Business Studies

The Business Studies specification is designed to encourage students to develop an appreciation of how their lives are shaped by economic and social factors. Through engaging with the specification, students are enabled to make informed decisions, to better manage their personal financial resources and to be adaptable, creative, and enterprising. Business studies also improves their knowledge and understanding of good business practice and of business as a productive activity.

The specification for Business Studies supports the development of entrepreneurship which enhances the quality of our collective and individual lives, often changing the way we work, communicate and live. The Business Studies specification aims to provide an awareness, insight and positive attitude to entrepreneurship and how it can improve our goods, services and institutions.

Through the Business Studies specification, students are encouraged to develop skills for learning, skills for work and skills for life. The development of analytical and critical thinking skills is fostered through the specification, and students are encouraged to develop problem-solving skills.

Business studies explores the interdependence of economic prosperity, societal well-being and the environment and encourages students to think and act as responsible and ethical citizens. Students will be provided with a set of foundational skills, understandings and personal attributes, which will help them to engage with the dynamic business environment and fulfil their potential in their personal and professional lives.

Learning in the Business Studies specification is set out in three interlinked strands of Personal Finance, Enterprise and Our Economy. There are thirty-seven learning outcomes spread across the three strands. To give further emphasis to the integrated nature of learning, the outcomes for each strand are grouped by reference to three elements: Managing My Resources, Exploring Business, and Using Skills for Business.

Assessment overview for Business Studies

<p>CBA1</p>	<p>Business in Action (4 weeks)</p> <p>Choice of three areas for a group project:</p> <p>Enterprise in Action</p> <p>Finance in Action</p> <p>Economics in Action</p>
<p>CBA2</p>	<p>Presentation (3 weeks)</p> <p>Students to investigate and present on a business-related topic.</p> <p>The chosen topic may be directly related to specific course content or students may decide to study an issue of personal or local relevance, provided it is related to the business environment</p>
<p>Assessment Task</p>	<p>The Assessment Task links to the priorities of the Presentation, which offers students the opportunity to apply their knowledge, skills and understanding to different real-life settings and to develop their communication skills.</p>
<p>Final Examination</p>	<p>Students will be required to engage with, demonstrate comprehension of, and provide written responses to stimulus material. The content and format of the final examination may vary from year to year. In any year, the learning outcomes to be assessed will constitute a sample of the outcomes from the tables of learning outcomes.</p>

<https://curriculumonline.ie/getmedia/a00357e9-fa82-4f60-99f7-adae882eeb67/FINAL-NCCA-Specification-for-Jr-Cycle-Business-Studies-v5.pdf>

Course overview for Science

The Science specification is designed to enable students to enhance their scientific literacy by developing their ability to explain phenomena scientifically; their understanding of scientific inquiry; and their ability to interpret and analyse scientific evidence and data to draw appropriate conclusions.

Developing scientific literacy is important to social development. As part of this process students develop the competence and confidence needed to meet the opportunities and challenges of senior cycle sciences, employment, further education and life. The wider benefits of scientific literacy are well established, including giving students the capacity to make contributions to political, social and cultural life as thoughtful and active citizens who appreciate the cultural and ethical values of science. This supports students to make informed decisions about many of the local, national and global challenges and opportunities they will be presented with as they live and work in a world increasingly shaped by scientists and their work.

Science is not just a tidy package of knowledge, nor is it a step-by-step approach to discovery. Nonetheless, Science is able to promote the development of analytical thinking skills such as problem-solving, reasoning, and decision-making. Learning science in junior cycle can afford students opportunities to build on their learning of primary science and to activate intuitive knowledge to generate, explore and refine solutions for solving problems. This may not always yield the expected result, but this, in turn, can be the focus for deeper learning and help the student to develop an understanding of risk and a realisation that different approaches can be adopted. As students develop their investigative skills, they will be encouraged to examine scientific evidence from their own experiments and draw justifiable conclusions based on the actual evidence. In reviewing and evaluating their own and others' scientific evidence and data, they will learn to identify limitations and improvements in their investigations. This collaborative approach will increase students' motivation and provide opportunities for working in groups and to develop the key skills of junior cycle.

Science is a collaborative and creative human endeavour arising from our desire to understand the world around us and the wider universe. Essentially, it is curiosity in thoughtful and deliberate action. Learning science through inquiry enables students to ask more questions, and to develop and evaluate explanations of events and phenomena they encounter.

Assessment overview for Business Studies

<p>CBA1</p>	<p>Extended Experimental Investigation (3 weeks)</p> <p>Students formulate a scientific hypothesis, plan and conduct an experimental investigation to test their hypotheses, generate and analyse primary data, and reflect on the process, with support/ guidance by the teacher.</p>
<p>CBA2</p>	<p>Science in Society Investigation (3 weeks)</p> <p>Student research a socio-scientific issue, analyse the information/ secondary data collected, and evaluate the claims and opinions studied and draw evidence-based conclusions about the issues involved, with support/guidance by the teacher.</p>
<p>Assessment Task</p>	<p>The Assessment Task is specified by the NCCA and is related to the learning outcomes on which the second Classroom-Based Assessment is based</p>
<p>Final Examination</p>	<p>Students will be required to engage with, demonstrate comprehension of, and provide written responses to stimulus material. The content and format of the final examination may vary from year to year. In any year, the learning outcomes to be assessed will constitute a sample of the outcomes from the tables of learning outcomes.</p>

<https://curriculumonline.ie/getmedia/f668d804-6283-4d4a-84ab-c71e5b37d198/Specification-for-Junior-Cycle-Science.pdf>

